UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/727,071	11/30/2000	Charles David Johnson	IBMN.011US01 (0517)	2728

7590 06/05/2006

Chambliss, Bahner & Stophel, P.C.
1000 Tallan Building
Two Union Square
Chattanooga, TN 37402

EXAMINER	
MENBERU, BENIYAM	
ART UNIT	**PAPER NUMBER**
2625	

DATE MAILED: 06/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/727,071	JOHNSON, CHARLES DAVID	
	Examiner	Art Unit	
	Beniyam Menberu	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 January 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18 and 20-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18 and 20-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Arguments

1. Applicant's arguments, see Remarks, filed January 25, 2006, with respect to the rejection(s) of claim(s) 1, 15, 18, 20, 24, and 25 under U.S. Patent No. 5287434 to Bain et al in view of JP 08-221227 to Ota have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent No. 5880447 to Okada et al, U.S. Patent No. 5860066 to Rouse, U.S. Patent No. 5825988 to Collard et al, and U.S. Patent No. 5559933 to Boswell.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 6, 7, 12, 13, 14, 15, 16, 18, 20, 22, 24, 25, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5880447 to Okada et al.

Regarding claim 1, Okada et al discloses a method for processing print jobs on a printing device having at least one named print queue and a residual print queue (column 4, lines 5-19) comprising:

receiving print jobs (column 4, lines 24-33);

forwarding print jobs having a print queue designation that matches a named print queue in the printing device to the designated print queue (column 4, lines 33-67; column 5, lines 1-39); forwarding, to the residual print queue, print jobs having a print queue designation that does not match a named print queue in the printing device when the print job is initially received by the printing device (Figure 3, print queue name q3 reads on residual print queue since queue name q3 does not match q1 or q2 ; column 4, lines 66-67; column 5, lines 1-6) ; and forwarding print jobs from the residual print queue to a print engine for printing (column 7, lines 40-67).

Regarding claim 2, Okada et al teach all the limitations of claim 1. Further Okada et al disclose the method of Claim 1, further comprising printing a print job forwarded to a named print queue in the printing device (column 8, lines 34-61).

Regarding claim 6, Okada et al teach all the limitations of claim 1. Further Okada et al disclose the method of Claim 1, further comprising determining whether the print jobs identify print queue designations that do not match a named print queue (column 5, lines 12-30).

Regarding claim 7, Okada et al teach all the limitations of claim 1. Further Okada et al disclose the method of Claim 6, wherein determining whether the print jobs identify print queue designations that do not match a named print queue comprises comparing a queue name field in a corresponding print job command to each of the print queue designations corresponding to the named print queues (column 5, lines 12-30).

Regarding claim 12, Okada et al teach all the limitations of claim 1. Further Okada et al disclose the method of Claim 1, further comprising transmitting the print jobs from a client computer system to the printing device (column 3, lines 13-16; column 4, lines 35-40).

Regarding claim 13, Okada et al teach all the limitations of claim 12. Further Okada et al disclose the method of Claim 12, wherein at least the client computer system and the printing device are configured in a network (column 3, lines 13-23).

Regarding claim 14, Okada et al teach all the limitations of claim 1. Further Okada et al disclose the method of Claim 1, wherein forwarding print jobs to the residual print queue comprises transmitting the print jobs as part of a print command, wherein the print command includes a queue name field to identify the print queue designation (column 3, lines 32-39; column 5, lines 11-16).

Regarding claim 15, Okada et al disclose a printer for receiving and processing print jobs from at least one client computing system, the printer comprising:

one or more predefined print queue each having a print queue name respectively assigned thereto (column 4, lines 5-19);

a residual print queue (column 4, lines 5-19; queue q3 can represent the residual queue.);

a job control module configured and arranged to receive the print jobs from the client computing system (column 4, lines 24-33) and to direct the print jobs that do not identify the print queue names assigned to the predefined print queues when the print jobs are initially received by the printer to the residual print queue (Figure 3, print queue name q3 reads on residual print queue since queue name q3 does not match q1 or q2 ; column 4, lines 66-67; column 5, lines 1-6); and

a print engine for printing one or more of the print jobs in the residual print queue (column 7, lines 40-67).

Regarding claim 16, Okada et al disclose the printer as in Claim 15, wherein the job control module comprises a compare module to determine whether the print job identities one of

the print queue names assigned to the predefined print queues (column 4, lines 32-35, lines 52-55).

Regarding claim 18, Okada et al disclose a print server for processing print jobs (column 3, lines 17-20), wherein the print server includes one or more print queues each preassigned a print queue name (column 4, lines 9-19), the print server comprising:

a residual print queue that does not correspond to any of the preassigned print queue names (column 4, lines 5-19; queue q3 can represent the residual queue.);

means for receiving an incoming print job command, wherein the incoming print job command includes a target queue name (column 5, lines 12-16);

means for determining whether the target queue name associated with each of the incoming print job commands conforms to one of the preassigned print queue names (column 5, lines 12-30);

means for directing the print jobs whose target queue name conforms to one of the preassigned print queue names to its respective print queue (column 8, lines 1-10, lines 34-43);

means for directing the print jobs whose target queue name does not conform to one of the preassigned print queue names when the print jobs are initially received by the means for receiving the incoming print job command to the residual print queue (Figure 3, print queue name q3 reads on residual print queue since queue name q3 does not match q1 or q2 ; column 4, lines 66-67; column 5, lines 1-6; column 7, lines 40-52);

means for forwarding the print jobs in the print queues and the residual print queue to a print engine for printing (column 7, lines 53-67; column 8, lines 10-33) .

Regarding claim 20, Okada et al disclose a computer-readable program storage medium tangibly embodying a program of instructions executable by a print server system to process print jobs by performing steps comprising(column 3, lines 17-20, lines 30-57):

assigning print queue names to each of the one or more print queues of the print server system (column 5, lines 11-16, lines 25-30);

defining a residual print queue in addition to the one or more print queues (column 4, lines 9-15; q3 represents the residual queue);

forwarding print jobs, that when initially received identify destination print queue names that are not among the assigned print queue names of the one or more print queues, to the residual print queue (Figure 3, print queue name q3 reads on residual print queue since queue name q3 does not match q1 or q2 ; column 4, lines 66-67; column 5, lines 1-6; column 7, lines 40-52); and

forwarding one or more of the print jobs stored in the residual print queue to a print engine for printing (column 7, lines 53-67; column 8, lines 10-33).

Regarding claim 22, Okada et al teaches all the limitations of claim 20. Further Okada et al discloses the computer-readable program storage medium of Claim 20,

wherein the program of instructions further performs the step comprising determining whether the print jobs identify destination print queue names that are not among the assigned print queue names (Figure 3, print queue name q3 reads on residual print queue since queue name q3 does not match q1 or q2 ; column 4, lines 66-67; column 5, lines 1-6; column 7, lines 40-52).

Regarding claim 24, Okada et al disclose a computer network for facilitating the processing of print jobs from a plurality of client computer systems by at least one server computer system (Figure 1, reference 2, 3, 5), comprising:

a client job control module, at each client computer system, to generate print job commands for printing corresponding print jobs, wherein each of the print job commands includes a destination print queue name (column 4, lines 26-31; column 5, lines 11-16);

transmission media coupled between each of the client computer systems and the server computer system to transmit the print jobs from the client computer systems to the server computer system (Figure 1, reference 1; column 3, lines 12-15);

a plurality of print queues, at the server computer system, wherein each of the plurality of print queues is assigned a predetermined print queue name (column 4, lines 9-15; q1 and q2 represent the predetermined print queue name);

a residual print queue at the server computer system (column 4, lines 9-15; q3 represents the residual queue);

a server job control module, at the server computer system, to receive the print job commands transmitted via the transmission media, and to store the print jobs in one of the plurality of print queues (column 8, lines 1-10), wherein the server job control module comprises:

a compare module configured and arranged to compare the destination print queue names to the predetermined print queue names (Figure 3, st2; column 4, lines 32-55), and to provide a undefined queue name identifier if the destination print queue names do not correspond to any of

the predetermined print queue names when the print jobs are initially received (q3 represents the undefined queue name identifier ; (column 4, lines 65-67; column 5, lines 1-6);

a queue name resolution module coupled to receive the undefined queue name identifier, and to direct the print jobs having the destination print queue names that do not correspond to any of the predetermined print queue names when the print jobs are initially received to the residual print queue upon receipt of the undefined queue name identifier (column 4, lines 65-67; column 5, lines 1-6; column 7, lines 39-51); and

a print engine coupled to the server computer system to receive one or more of

the print jobs in the residual print queue (column 7, lines 50-67).

Regarding claim 25, Okada et al disclose a method for processing print jobs on a printing device having one or more print queues (column 4, lines 9-15); the method comprising;

assigning print queue names to each of the one or more print queues of the printing device (column 5, lines 12-30);

defining a residual print queue in addition to the one or more print queues (column 4, lines 9-15; q3 represents the residual queue);

forwarding print jobs, that identify destination print queue names when the print jobs are initially received that are not among the assigned print queue names of the one or more print queues, to the residual print queue (Figure 3, print queue name q3 reads on residual print queue since queue name q3 does not match q1 or q2 ; column 4, lines 66-67; column 5, lines 1-6; column 7, lines 40-52); and

forwarding one or more of the print jobs stored in the residual print queue to a print engine for printing (column 7, lines 53-67; column 8, lines 10-33).

Regarding claim 26, Okada et al teach all the limitations of claim 25. Further Okada et al disclose the method of Claim 25, further comprising:

forwarding second print jobs, that identify destination print queue names that correspond to one of the assigned print queue names, to its corresponding print queue of the printing device (column 8, lines 1-10, lines 34-43); and

printing one or more of the print jobs stored in the print queues having the assigned print queue names (column 8, lines 11-33, lines 44-61).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 3, 4, 5, 17, 21, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5880447 to Okada et al in view of U.S. Patent No. 5860066 to Rouse.

Regarding claim 3, Okada et al teaches all the limitations of claim 1. However Okada et al does not disclose the method of Claim 1, further comprising converting a print queue designation of a print job having a print queue designation that does not match a named print queue in the printing device, to a residual print queue designation, wherein the residual print queue designation corresponds to the residual print queue.

Rouse discloses the method of Claim 1, further comprising converting a print queue designation of a print job having a print queue designation that does not match a named print queue in the printing device, to a residual print queue designation, wherein the residual print queue designation corresponds to the residual print queue (column 8, lines 15-33; column 14, lines 41-67; column 15, lines 1-2; unmatched queue 84 represents the residual queue.).

Okada et al and Rouse are combinable because they are in the similar problem area of printing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the print queue designation of Rouse with the printing system of Okada et al to implement conversion to an alternate print queue when the print queue designation does not exist or match.

The motivation to combine the reference is clear because unmatched documents should be placed separately for the purpose of organization of documents to be processed.

Regarding claim 4, Okada et al in view of Boswell teaches all the limitations of claim 3. Further Rouse discloses the method of Claim 3, wherein forwarding print jobs to the residual print queue comprises recognizing converted print queue designations as the residual print queue designation, and forwarding the corresponding print jobs to the residual print queue in response thereto (column 8, lines 15-33; column 14, lines 41-67; column 15, lines 1-2; unmatched queue 84 represents the residual queue.).

Regarding claim 5, Okada et al in view of Boswell teaches all the limitations of claim 4. Further Okada et al discloses the method of Claim 4, further comprising determining whether the print jobs are targeted for the residual print queue by comparing the residual print queue

designation to a group of queue designations including the residual print queue designation and the print queue designations that match a named print queue (column 4, lines 32-67; column 5, lines 1-38; Figure 3).

Regarding claim 17, Okada et al teach all the limitations of claim 16. Further Rouse discloses the printer as in Claim 16, wherein the job control module further comprises a queue name resolution module coupled to receive an indication from the compare module indicating that the print job identifies an undefined print queue name, and to convert the undefined print queue name to a special print queue name corresponding to the residual print queue (column 8, lines 15-33; column 14, lines 41-67; column 15, lines 1-2; unmatched queue 84 represents the special print queue name.).).

Regarding claim 21, Okada et al teach all the limitations of claim 20. Further Rouse discloses the computer-readable program storage medium of Claim 20, wherein the program of instructions further performs the steps comprising:

defining a residual print queue name for the residual print queue; and converting each of the destination print queue names that are not among the assigned print queue names to the residual print queue name (column 8, lines 15-33; column 14, lines 41-67; column 15, lines 1-2; unmatched queue 84 represents the residual print queue name.)).

Regarding claim 27, Okada et al teaches all the limitations of claim 25. Further Rouse discloses the method of Claim 25, further comprising:

defining a residual print queue name for the residual print queue; and

converting each of the destination print queue names that are not among the

assigned print queue names to the residual print queue name (column 8, lines 15-33; column 14, lines 41-67; column 15, lines 1-2; unmatched queue 84 represents the residual print queue name.).

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5880447 to Okada et al in view of U.S. Patent No. 5825988 to Collard et al.

Regarding claim 8, Okada et al teaches all the limitations of claim 7. However Okada et al does not disclose wherein the print job command is transmitted in accordance to a Line Printer Daemon Protocol (LPD Protocol).

Collard et al discloses wherein the print job command is transmitted in accordance to a Line Printer Daemon Protocol (LPD Protocol) (column 5, lines 65-67; column 6, lines 1-10).

Okada et al and Collard et al are combinable because they are in the similar problem area of printing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the LPD protocol of Collard et al with the print system of Okada et al to implement LPD protocol in printing using queues.

The motivation to combine the reference is clear because Collard et al teaches that in UNIX systems the print command use the LPD (column 5, lines 65-67; column 6, lines 1-10).

7. Claims 9, 10, 11, 23, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5880447 to Okada et al in view of U.S. Patent No. 5559933 to Boswell.

Regarding claim 9, Okada et al teaches all the limitations of claim 1. However Okada et al does not disclose the method of Claim 1, further comprising commonly filtering the print jobs

that identify the print queue designations that do not match a named print queue with a shared filter.

Boswell discloses the method of commonly filtering the print jobs that identify the print queue designations that do not match a named print queue with a shared filter (column 11, lines 1-9; column 13, lines 65-67; column 14, lines 1-10. The mask taught by Boswell reads on the filtering method.).

Okada et al and Boswell are combinable because they are in the similar problem area of printing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the filtering of print jobs with the printing system of Okada et al to implement print job filtering of queue.

The motivation to combine the reference is clear because the filtering or masking as taught by Boswell is useful in determining the execution process of a print job (column 14, lines 10-30).

Regarding claim 10, Okada et al in view of Boswell teach all the limitations of claim 9. Further Boswell discloses the method of Claim 9, further comprising filtering the print jobs that identify the print queue designations that match a named print queue with one or more filters different from the shared filter (column 13, lines 65-67; column 14, lines 1-10; column 25, lines 52-67).

Regarding claim 11, Okada et al in view of Boswell teach all the limitations of claim 10. Further Boswell disclose the method of Claim 10, wherein each of the one or more filters corresponding to the print queue designations that match a named print queue is associated with

a different one of the print queues (Figure 11 shows a selection for file masks or filtering (column 19, lines 40-50;). Each such masks contain filtering for "Host Queue" as shown in middle column of Figure 11.).

Regarding claim 23, Okada et al teach all the limitations of claim 20. Further Boswell discloses the computer-readable program storage medium of Claim 20,
wherein the program of instructions further performs the step comprising commonly filtering the print jobs that identify the destination print queue names that are not among the assigned print queue names with a shared tilter (column 11, lines 1-9; column 13, lines 65-67; column 14, lines 1-10. The mask taught by Boswell reads on the filtering method.).

Regarding claim 28, Okada et al teaches all the limitations of claim 25. Further Boswell discloses the method of Claim 25, further comprising commonly filtering
the print jobs that identify the destination print queue names that are not among the assigned print queue names with a shared filter (column 11, lines 1-9; column 13, lines 65-67; column 14, lines 1-10. The mask taught by Boswell reads on the filtering method.).

Regarding claim 29, Okada et al teaches all the limitations of claim 28. Further Boswell discloses the method of Claim 28, further comprising filtering the print jobs
that identify the destination print queue names that are among the assigned print queue names with one or more filters different from the shared filter (column 13, lines 65-67; column 14, lines 1-10; column 25, lines 52-67).

Other Prior Art Cited

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6075615 to Nakamura discloses control apparatus for printers with queue allocation.

U.S. Patent No. 6813038 to Kadowaki discloses apparatus for receiving print jobs.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

> A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beniyam Menberu whose telephone number is (571) 272-7465. The examiner can normally be reached on 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on (571) 272-7471. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (571) 272-2600. The group receptionist number for TC 2600 is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner

Beniyam Menberu
BM
05/26/2006

KA Williams

KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER